"PATENT"

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:	)
LESTER F. LUDWIG	)
SERIAL NO.: UNKNOWN	) Group No: UNKNOWN )
FILED: September 30, 2003	) Examiner: UNKNOWN )
FOR: DERIVATION OF CONTROL SIGNALS FROM REAL-TIME OVERTONE MEASUREMENTS	) ) )
Commissioner for Patents Post Office Box 1450 Alexandria, Virginia 22313-1450	

Sir:

## INFORMATION DISCLOSURE STATEMENT

Applicant hereby cites the documents listed in accompanying Form PTO/SB/08A with respect to the above-referenced patent application under the provisions of 37 CFR, §§ 1.56, 1.97 and 1.98. With one exception, the documents listed on this Form are issued U.S. patents or published U.S. patent applications, or have been made of record in parent applications Nos. 09/812,400 and 09/313,533. Accordingly, Applicant is not submitting duplicate copies of these documents, but requests that they be listed on the face of any patent granted on the above application (See 1138 TMOG 39, second column, last paragraph, last sentence). Foreign patent application, listed as document B1, is a newly submitted reference and a copy of such is enclosed. The filing of this Information Disclosure Statement will not be construed to mean that a search was conducted or that no other material information, as defined by 37 CFR 1.56, exists.

The Examiner is respectfully requested to make the listed documents of record in connection with the prosecution of the subjection application.

Respectfully submitted,

By:

Jeffrey J. Lotspeich Attorney for Applicant

Registration No. 45,737

THE MAXHAM FIRM

A PROFESSIONAL LAW CORPORATION SYMPHONY TOWERS 750 "B" STREET, SUITE 3100 SAN DIEGO, CALIFORNIA 92101 TELEPHONE: (619) 233-9004 FACSIMILE: (619) 544-1246 Approved for use through 10/31/2002. OMB 0651-0031
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Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number. Substitute for form 1449A/PTO C mplete if Kn wn **Application Number** INFORMATION DISCLOSURE Filing Date September 30, 2003 STATEMENT BY APPLICANT First Named Inventor Lester F. Ludwig Group Art Unit (use as many sheets as necessary) **Examiner Name** Sheet of 13 Attorney Docket Number 2738-14

			U.S. PATENT	OCUMENTS	
Examiner Cite Initials * No.1		Document Number  Number - Kind Code <sup>2</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	A1	US-1,947,020	02-13-1934	Ranger	***************************************
	A2	US-3,493,669	02-03-1970	Elbrecht et al.	
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	B1	EP-0 574 213-A1	12-15-1993	Synaptics, Inc.		
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INFO	<b>PRMATION</b>	DIS	CLOSURE	Filing Date	September 30, 2003	
STA	TEMENT B	ΥΑ	PPLICANT	First Named Inventor	Lester F. Ludwig	
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	STATEMENT BY APPLICANT				PPLICANT	First Named Inventor	Lester F. Ludwig		
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STAT	<b>TEMENT B</b>	Y A	PPLICANT	First Named Inventor	Lester F. Ludwig	
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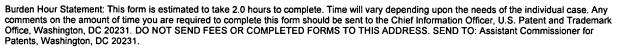
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STAT	EMENT B	YA	PPLICANT	First Named Inventor	Lester F. Ludwig	
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		OTHER PRIOR ART NON PATENT LITERATURE DOCUMENTS	
Examiner Initials *	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
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	C12	Boss SE-70 Super Effects Processor Owners Manual, Roland Corporation, 7200 Dominion Circle, Los Angeles, CA 90040-3696, USA.	
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	C24	GRAY,PETER, and SCOTT,STEPHEN K, "Chemical Oscillations and Instabilities," 1990, Clarendon Press, Oxford, Great Britain.	
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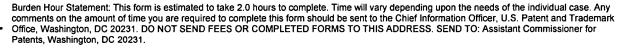
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て	Sheet	9	of	f 13	Attorney Docket Number	2738-14	

		OTHER PRIOR ART NON PATENT LITERATURE DOCUMENTS	
Examiner Initials *	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	C45	MURPHY, AAMODT, Spicer and Royce (eds) Photoacoustic and Photothermal Phenomena II, 1990, vol. 62, Springer-Verlag, Berlin Heidelberg, Germany.	
	C46	NAGY-UNGVARAI, Z. and HESS, BENNO "Control of Dynamic Pattern Formation in the Belous-ov-Zhabotinsky Reaction" Physica D (1991) North-Holland.	
	C47	NICOLIS, G and BARAS, F (eds.), Chemical Instabilities, 1984, D.Reidel Publishing, Dordrecht/Bos-ton/Lancaster.	
	C48	NICOLIS, G., "Nonlinear Phenomena in Chemistry", Introduction to Nonlinear Science, 1995, Cambridge University Press, Great Britain.	
	C49	Omnichord OM-250m, Suzuki, Box 261030, San Diego, CA 92196, USA.	
	C50	ORBAN, M., KURIN-CSORGEI, K., ZHABOTINSKY, A, and EPSTEIN, I, "New Indicators for Visualizing Pattern Formation in Uncatalyzed Bromate Oscillatory Systems", J. Am. Chem. Soc. 1998, Vol. 120, pp. 1146-1150.	
	C51	PC-1600 Midi Controller, Peavy Corporation, 711 A St., Meridan, MS 39302-2898, USA.	
	C52	PENNYWITT, KIRK "Robotic Tactile Sensing," Byte, Jan., 1986.	
	C53	PLM 8128E, Peavey, Corporation, 711 A St., Meridan, MS 39302-2898, USA.	:
	C54	PMC10 Program. MIDI Foot Controller, Digitech, Salt Lake City, UT, USA.	
	C55	Review of KORG X-230 Drum (later called "Wave Drum"), Electronic Musician, Apr. 1994.	

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	C56	RICH, ROBERT "Buchla Lightning MIDI Controller", Electronic Musician, Oct. 1991.	
	C57	RICH, ROBERT "Buchla Thunder", Electronic Musician, Aug. 1990.	
	C58	ROADS, C., "A Tutorial on Non-linear Distortion or Waveshaping Synthesis," Computer Music Journal, Vol. 3, No. 2, pp. 29-34, June 1979, People's Computer Company, Menlo Park, CA, USA.	
	C59	Robotic Tactile Sensig, Kirk Pennywitt, BYTE, Jan. 1986.	
	C60	Roland's COSM: A Whole New World of Sounds, Kikumoto/Meyer, Roland Users' Magazine. 7200 Dominion Circle, Los Angeles, CA, 90040-3696, USA.	
	C61	RONSE, CHRISTIAN and DEVIJVER, PIERRE A., Connected Components in Binary Images: the Detection Problem, 1984, Research Studies Press/ John Wiley & Sons Inc., New York, NY, USA.	
	C62	RSP-550 Algorithm Guide, Roland Corporation, 7200 Dominion Circle, Los Angeles, CA 90040-3696, USA.	
	C63	RSP-550 Owners Manual,Roland Corporation, 7200 Dominion Circle, Los Angeles, CA 90040-3696, USA.	
	C64	RUOFF, P. "How Bromate Oscillators Are Controlled", Am. Chem. Society, 1988.	
	C65	Sentient Six digital guitar interface, PASSAC, Milpitas, CA 95035, USA.	
_	C66	SGE MACH II, Applied Research and Technology, 215 Tremont St., Rochester, NY 14608, USA.	

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	C67	SHAPIRO, LARRY S, Affine Analysis of Image Sequences, 1995, Press Syndicate of the Cambridge University Press.	
	C68	SLAWSON, WAYNE, Sound Color, 1985, University of California Press, Berkeley, CA, USA.	
	C69	SNELL, JOHN M. "Sensors for Playing Computer Music with Expression", Proceedings of the Intl. Computer Music Conf. at Eastman, 1983.	
	C70	Switchblade 16, Sound Sculpture, 5741 Arapahoe Rd. Ste. 2a Boulder, CO 80303, USA.	
	C71	Synthophone, Softwwind Instruments, 304 Newbury St. Ste. 323, Boston, MA 02155, USA.	
	C72	Tactile sensors and the gripping challenge, IEEE Spectrum Aug. 1985.	
	C73	The Fretless Wizard, Biaxe, P.O. Box 15426, Stamford, CT, 06901-0426, USA.	
	C74	Trilogy, Hipshot Music Prods. Van Nuys, NY, USA.	
	C75	TYSON, JOHN J., The Belousov-Zhabotinskii Reaction, Springer-Verlag, Berlin/Heidelberg, Germany.	
	C76	Unlocking the Secrets of HRM (Harmonic Restructure Modeling), Craig Anderton, Roland Users' Magazine. 7200 Dominion Circle, Los Angeles, CA 90040-3696, USA.	
	C77	Various 6D Tracking Products, Ascension Technology Corporation, PO Box 527, Burlingame, VT 05402, USA.	

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<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.



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	OTHER PRIOR ART NON PATENT LITERATURE DOCUMENTS							
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	C78	VERNER, J. Artif Starr Switch Company Ztar 624-D, Electronic Musician, Nov. 1994.						
	C79	VG-8 Users Manual, Roland Corporation, 7200 Dominion Circle, Los Angeles, CA, 90040-3696, USA.						
	C80	VIBERG, MATS, Subspace Fitting Concepts in Sensor Array Processing, Linkoping Studies in Science and Technology, 1989, Dissertations No. 27 Linkoping, Sweden.						
	C81	VISINTIN, A. (ed.), Models of Hysteresis, Longman Scientific & Technical, 1993, Harlow, En-gland.						
_	C82	WANG, X-J, and NICOLIS, G. "Bifurcation Phenomena in Coupled Chemical Oscillators: Normal Form Analysis and Numerical Simulations", Physica 26D (1987), pp. 140-155, North-Holland, Amsterdam.						
	C83	WESSEL, C., "A Tuturial on Non-linear Distribution or Waveshaping Synthesis", Computer Music Journal, Jun. 1979, Vol. 3, No. 2, pp. 29-34, People's Computer Company, Menlo Park, CA., USA.						
	C84	WILKINSON, SCOTT "SynchroVoice MidiVox" Electronic Musician, Jul. 1992.						
	C85	WINCKEL and FRITZ, Music Sound, and Sensation: A Modern Exposition, 1967, Dover, New York, USA.						
	C86	Wind Machine, Anatek, Creation Technologies, 400 Brooksbank Ave. B.C. Canada V7J-1G9						
	C87	WX11 and Wt11, Yamaha, 6600 Orangethorpe Ave., Box 6600, Buena Park, CA, USA.						
<del>-</del>	C88	XSDR Al2 Synthesizer Module, KORG, Suqinamiku, Tokyo, Japan.						

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	C89	Yamaha FS1R, Electronic Musician, Dec., 1998.				
	C90	Yamaha WX11 and WT11, Midi Magazine Mar./Apr. 1994.Yamaha Corp. of America, 6600 Orangethorpe Ave., PO Box 6600 Buena Park, CA 90622-6600, 714 522-9011.				
	C91	ZTAR Midi Fingerboard Controllers-Starr Instruments/Starr Switch, 1717 Fifth Ave., San Diego, CA 92101, USA.				
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